## Abstract of the Disclosure

Provided is a manufacturing apparatus for a carbon nanotube including: at least two electrodes whose tips are opposed to each other; at least a power supply that applies a voltage between the two electrodes to generate discharge plasma in a discharge area between the two electrodes; and at least a plurality of magnets that generates, in a generation area of the discharge plasma, at least one of a magnetic field of multiple directions and a magnetic field having a component in parallel with a flowing direction of a discharge current, in which a thermal shield wall made of a non-magnetic material is disposed between the magnets and the generation area of the discharge plasma. Accordingly, an influence on the magnetic field due to the heat generated from the discharge plasma can be suppressed, and a high-purity carbon nanotube with excellent industrial efficiency can be stably manufactured.